

Regional Transmission Perspectives: WestConnect's Experience

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WestConnect Organization

- A Group of Transmission Owners in the Western Grid
- Organized under a Memorandum of Understanding
- Purposes:
 - Continue investigation of feasibility of cost-effective wholesale market enhancements
 - Work cooperatively with other Western Grid Organizations and market participants
 - Address seams issues in appropriate forums

WestConnect Organization

- Stakeholder Participation Encouraged
- Governed by a Steering Committee
 - One representative per transmission owner member
 - Financial commitments require 80% approval



WestConnect

Arizona Public Service

El Paso Electric

Imperial Irrigation District

Nevada Power Company

Public Service Colorado

Public Service New Mexico

Sacramento Municipal Utility District

Salt River Project

Sierra Pacific Power Company

Southwest Transmission Cooperative

Transmission Agency of Northern California

Tri-State G & T Association

Tucson Electric Power

Western Area Power Administration

- Rocky Mountain Region
- Desert Southwest Region
- Sierra Nevada Region
- CRSP Management Office

TOTALS Jan. 2007

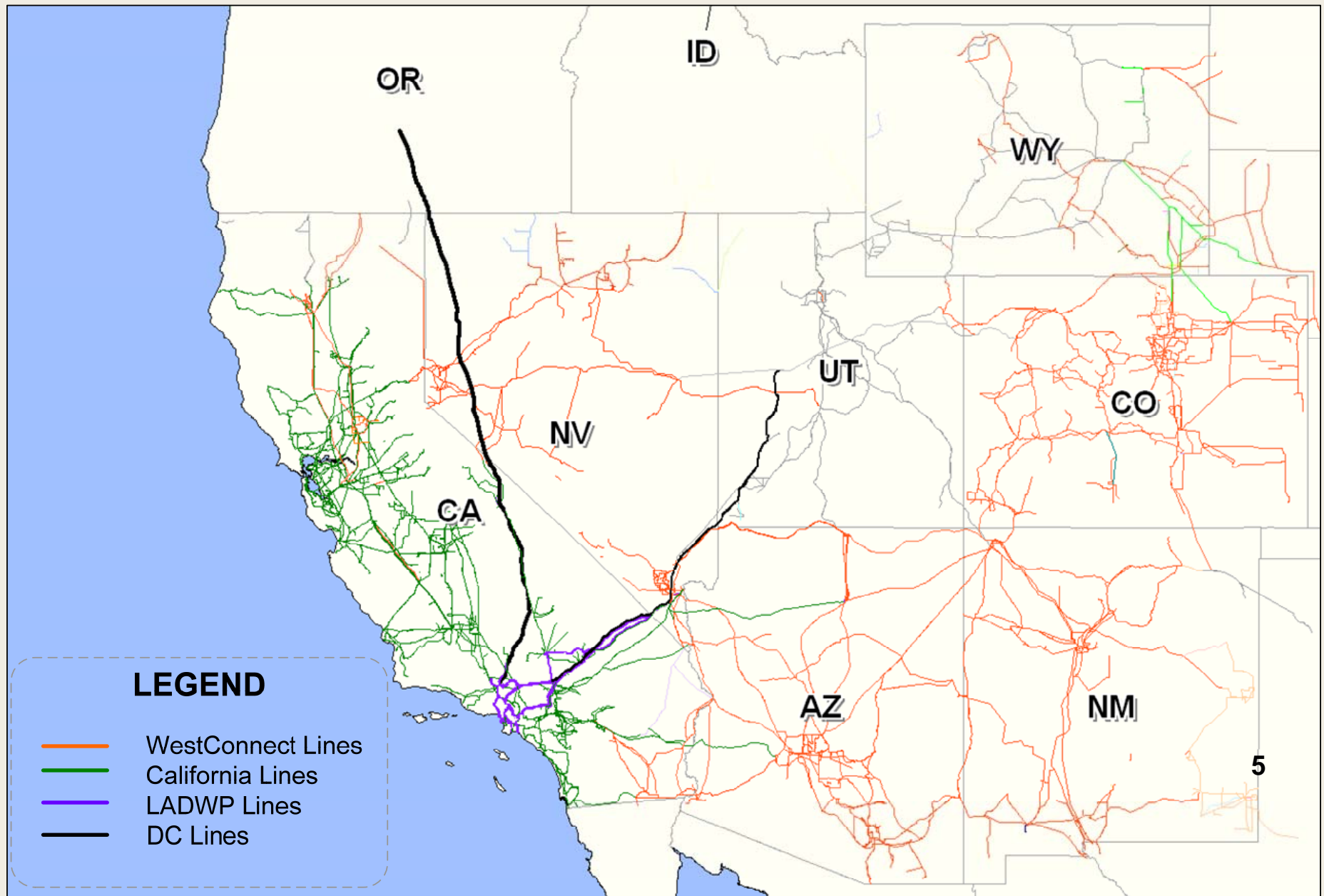
46,000 MW of Load

34,000 Miles of Transmission Line

7.0 Million Retail Customers Served

**WCPSC Conference
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WestConnect Transmission Footprint



Market Enhancement Initiatives

Active Work Groups

- Regional Pricing Experiment
- Virtual Control Area
- Transmission Products (Conditional Firm)
- TTC/ATC Process
- Flow Based Market Initiatives
- Regional Transmission Planning

Regional Pricing Experiment

- Developed a proposed two-year experiment to eliminate rate pancaking for hourly non-firm transactions
- FERC filing package prepared
- Experiment to begin in early 2009

Virtual Control Area Activities

- Joining NTTG Ace Diversity Interchange (ADI) Program – Q3 2008
- Western Wind & Solar Integration Study conducted by NREL to determine additional regulation enhancements
- Contingency reserve sharing analysis

Transmission Products

- Developed regional business practices for conditional firm transmission service
- Early stages of assessment of potential for standardization of planning redispatch practices

TTC/ATC Process

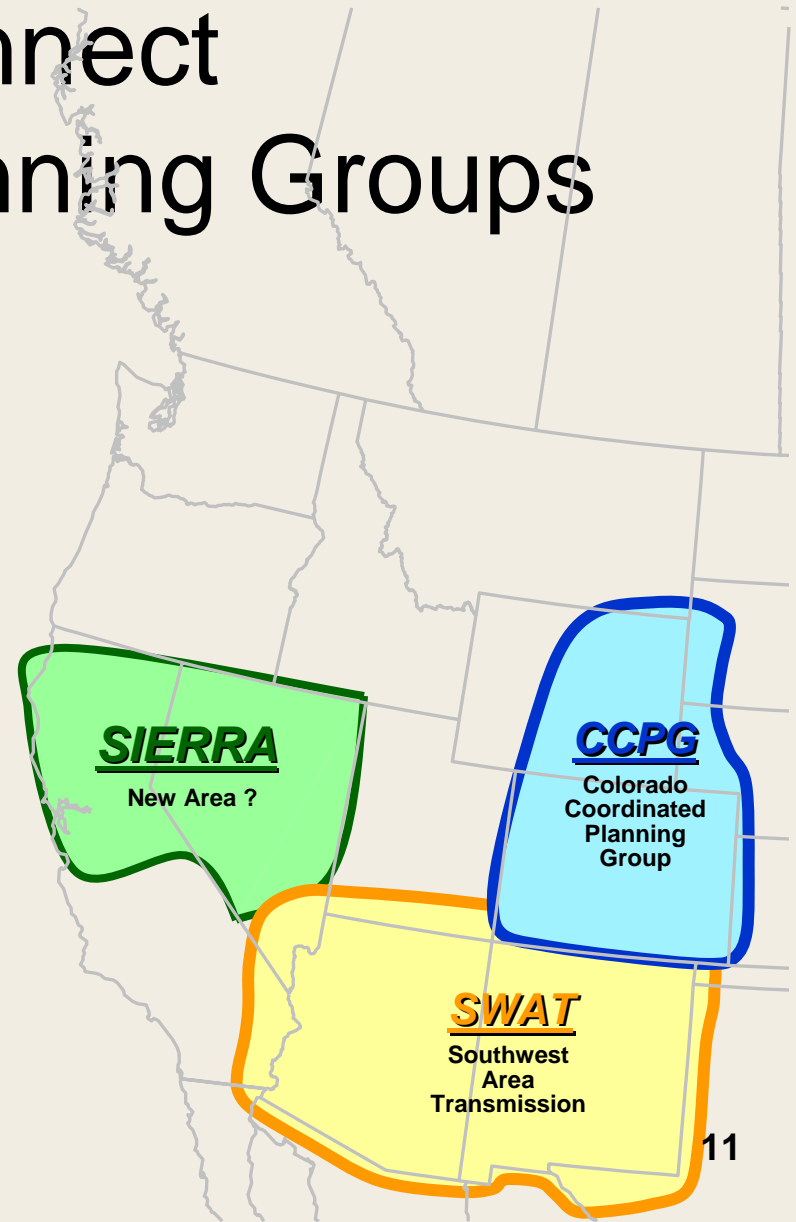
- Annual workshop held May 21, 2008
- Continuing efforts to make information available and responsive to stakeholders' needs

WestConnect Subregional Planning Groups

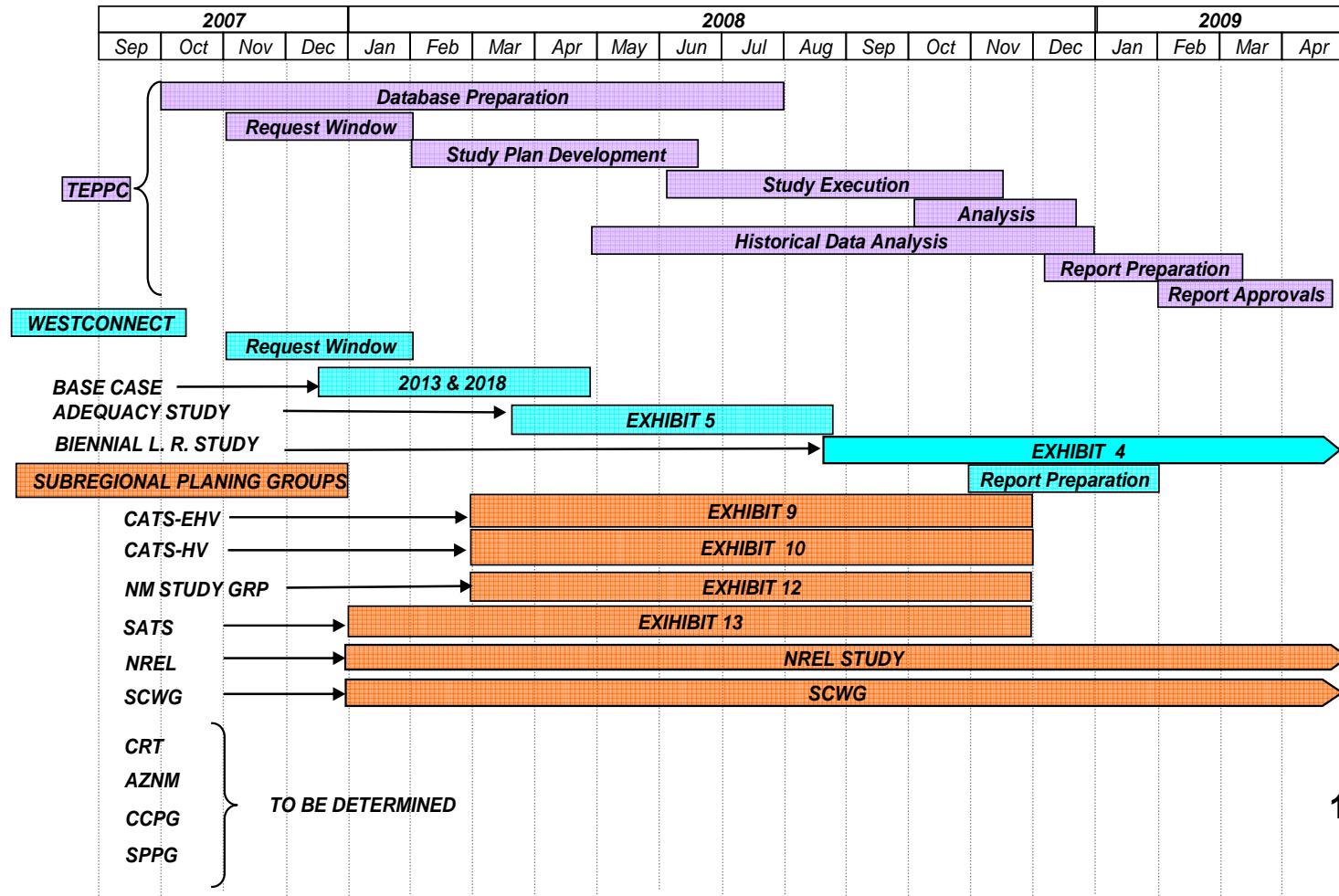
CCPG and SWAT act as
WestConnect technical planning
work groups for WestConnect
planning area

- Coordinate Base Cases for use
by all study participants
- Define subregional study plans,
provide study resources, and
perform studies
- Provide forum for coordination
and peer review of planning
studies and 10-year plans

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2008 Synchronized Study Plan



Planned Projects by State

State	No. Projects	Total Miles	Estimated Cost (2008 \$M)
Arizona	66	1,403	2,331
California	10	759	1,593
Colorado	16	1,892	2,016
Nevada	5	415	864
New Mex.	4	117	141
Texas	5	50	24
Multi-State	0	0	0
TOTAL	106	4,636	\$ 6,969

Conceptual Projects by State

State	No. Projects	Total Miles	Estimated Cost (2008 \$M)
Arizona	15	286	185
California	1	18	27
Colorado	0	0	0
Nevada	1	31	70
New Mex.	2	71	122
Texas	0	0	0
Multi-State	3	3,850	5,800
TOTAL	22	4,256	\$ 6,204

Planning Processes

- Details vary in each Subregional Planning Group
- Project commitment occurs through an open season process; i.e. projects getting financial commitments become the priority projects
- WestConnect footprint has high load growth – many reliability projects

Planning Processes

- Multi-technology renewable energy potential being developed for Arizona, New Mexico and Colorado

Challenges

- Resource mixes are uncertain, but transmission necessary to meet load growth under different generation scenarios
- Multi-state projects are being increasingly investigated
- Siting and permitting over multiple states is a challenge
 - Colorado Commission effort to “consult” with neighboring states a big step
 - States may need to adopt accommodative policies on “used and useful” to allow resource flexibility

Contacts and Information

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